

WHAT IS CLAIMED IS:

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1. An electronic apparatus, comprising:
an abnormality detector detecting an
abnormality when the abnormality occurs;
an abnormality type determination part
10 determining a type of the abnormality detected by said
abnormality detector; and
an abnormality notification part for informing
an external apparatus of the abnormality when the type
of the abnormality determined by said abnormality type
15 determination part represents an abnormality that cannot
be eliminated by a user of said electronic apparatus.

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2. The electronic apparatus as claimed in
claim 1, further comprising:
a use request reception part receiving a
request for using one or more functions; and
25 an abnormality display part that, in a case

where the type of abnormality determined by the abnormality type determination part represents an abnormality in a predetermined function, displays that the abnormality is occurring only when a request for 5 using the predetermined function is received by the use request reception part.

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3. The electronic apparatus as claimed in claim 1, further comprising:
a non-volatile storage part; and
an abnormality history writing part for 15 writing history of the abnormality to said non-volatile storage part when the type of the abnormality determined by the abnormality type determination part represents an abnormality that requires only history saving.

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4. The electronic apparatus as claimed in claim 1, further comprising:
25 an abnormality counter for counting the number

- of times of occurrence of an abnormality; and
an abnormality counter controller for causing
said abnormality counter to up count when the type of
the abnormality determined by the abnormality type
5 determination part represents an abnormality that can be
eliminated by the user of the electronic apparatus,
wherein the abnormality notification part
includes means for informing the external apparatus of a
corresponding abnormality when a count value of the
10 abnormality counter reaches a predetermined value.
- 15 5. The electronic apparatus as claimed in
claim 4, further comprising:
means for displaying occurrence of an
abnormality when the count value of the abnormality
counter has not reached the predetermined value.
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6. The electronic apparatus as claimed in
25 claim 4, further comprising:

a reset part resetting the count value of the abnormality counter when the count value thereof reaches the predetermined value.

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7. The electronic apparatus as claimed in claim 4, further comprising:

10 an image forming part forming an image on a recording medium;

 a sheet counter counting the number of sheets each having an image thereon formed by said image forming part since the abnormality that can be

15 eliminated by the user of the electronic apparatus is detected by the abnormality detector until the abnormality is detected again; and

 a reset part for resetting the count value of the abnormality counter when a count value of said sheet counter reaches the predetermined value.

25 8. The electronic apparatus as claimed in

claim 4, further comprising:

means for causing the electronic apparatus to reboot when the count value of the abnormality counter has not reached the predetermined value.

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9. The electronic apparatus as claimed in
10 claim 8, further comprising:

means for displaying that reboot is to be performed before the electronic apparatus is caused to perform reboot.

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10. A remote management system remotely managing a plurality of electronic apparatuses by a
20 management apparatus via a communication line,
comprising:

the plurality of electronic apparatuses; and
the management apparatus,
wherein each of the electronic apparatuses

25 includes:

an abnormality detector detecting an abnormality when the abnormality occurs in the electronic apparatuses;

- an abnormality type determination part
5 determining a type of the abnormality detected by said abnormality detector; and

an abnormality notification part for informing the management apparatus of the abnormality, together with identification information of one or more of the 10 electronic apparatuses in which the abnormality occurs, when the type of the abnormality determined by said abnormality type determination part represents an abnormality that cannot be eliminated by a user of said one or more of the electronic apparatuses.

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11. The remote management system as claimed in
20 claim 10, wherein each of the electronic apparatuses further includes:

- an abnormality counter counting the number of times of occurrence of an abnormality; and
an abnormality counter controller for causing
25 said abnormality counter to up count when the type of

the abnormality determined by the abnormality type determination part represents an abnormality that can be eliminated by the user of the electronic apparatus, and wherein the abnormality notification part of

5 each of the electronic apparatuses includes means for informing the management apparatus of a corresponding abnormality together with identification information of the electronic apparatus in which the abnormality occurs, when a count value of said abnormality counter reaches a

10 predetermined value.

15 12. The remote management system as claimed in claim 11, wherein each of the electronic apparatuses further includes means for displaying that an abnormality is occurring when the count value of the abnormality counter has not reached the predetermined

20 value.

25 13. The remote management system as claimed in

claim 11, wherein each of the electronic apparatuses further includes a reset part for resetting the count value of the abnormality counter when the count value thereof reaches the predetermined value.

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14. The remote management system as claimed in
10 claim 11, wherein each of the electronic apparatuses further includes:

an image forming part forming an image on a recording medium;

15 a sheet counter for counting the number of sheets each having an image thereon formed by said image forming part since the abnormality that can be eliminated by the user of the electronic apparatus is detected by the abnormality detector until the abnormality is detected again; and

20 a reset part resetting the count value of the abnormality counter when a count value of said sheet counter reaches a predetermined value.

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15. The remote management system as claimed in claim 11, wherein each of the electronic apparatuses further includes:

5 means for causing the electronic apparatus to reboot when the count value of the abnormality counter has not reached the predetermined value.

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16. The remote management system as claimed in claim 15, wherein each of the electronic apparatuses further includes:

15 means for displaying that reboot is to be performed before the electronic apparatus is caused to perform reboot.

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17. A method of controlling an electronic apparatus, said method comprising the steps of:
detecting an abnormality when the abnormality
25 occurs in the electronic apparatus;

determining a type of the detected abnormality; and

informing an external apparatus of the abnormality when the determined type of the abnormality
5 represents an abnormality that can not be eliminated by a user of the electronic apparatus.

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18. The method as claimed in claim 17, further comprising the step of:

displaying, in a case where the determined type of the abnormality represents an abnormality in a
15 predetermined function, that the abnormality is occurring, only when a request for using the predetermined function is received.

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19. The method as claimed in claim 17, further comprising the step of:

saving history of the abnormality when the
25 determined type of the abnormality represents an

abnormality that requires only history saving.

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20. The method as claimed in claim 17, further comprising the steps of:

up counting a count value when the determined type of the abnormality represents an abnormality that
10 can be eliminated by the user of the electronic apparatus; and

informing the external apparatus of a corresponding abnormality when the count value reaches a predetermined value.

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21. The method as claimed in claim 20,
20 further comprising the step of:

displaying that an abnormality is occurring when the count value has not reached the predetermined value.

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22. The method as claimed in claim 20, further comprising the step of:

5 resetting the count value when the count value thereof reaches the predetermined value.

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23. The method as claimed in claim 20, further comprising the step of:

causing the electronic apparatus to reboot
when the count value has not reached the predetermined
15 value.

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24. The method as claimed in claim 23, further comprising the step of:

displaying that reboot is to be performed
before the electronic apparatus is caused to perform
25 reboot.

5 25. A program for causing a computer to control an electronic apparatus, said program comprising the instructions of:

 causing the computer to detect an abnormality when the abnormality occurs in the electronic apparatus;

10 causing the computer to determine a type of the detected abnormality; and

 causing the computer to inform an external apparatus of the abnormality when the type of the abnormality is determined to represent an abnormality 15 that cannot be eliminated by a user of the electronic apparatus.

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26. The program as claimed in claim 25, further comprising the instructions of:

 causing the computer to receive a request for using one or more functions of the electronic apparatus; 25 and

causing the computer to display that the abnormality is occurring, in a case where the type of abnormality is determined to represent an abnormality in a predetermined function, and only when a request for
5 using the predetermined function is received.

10 27. The program as claimed in claim 25,
further comprising the instruction of:

 causing the computer to save history of the abnormality when the type of the abnormality is determined to represent an abnormality that requires
15 only history saving.

20 28. The program as claimed in claim 25,
further comprising the instructions of:

 causing the computer to count the number of times of occurrence of an abnormality in the electronic apparatus;

25 causing the computer to up count when the type

of the abnormality is determined to represent an abnormality that can be eliminated by the user of the electronic apparatus; and

causing the computer to inform the external
5 apparatus of a corresponding abnormality when a count value reaches a predetermined value.

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29. The program as claimed in claim 28,
further comprising the instruction of:

causing the computer to display occurrence of
an abnormality when the count value has not reached the
15 predetermined value.

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30. The program as claimed in claim 28,
further comprising the instruction of:

causing the computer to reset the count value
when the count value thereof reaches the predetermined
value.

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31. The program as claimed in claim 28,
5 further comprising the instructions of:
causing the computer to form an image on a
recording medium;
causing the computer to count the number of
sheets each having an formed image thereon since the
10 abnormality that can be eliminated by the user of the
electronic apparatus is detected until the abnormality
is detected again; and
causing the computer to reset the count value
when a count value of the number of sheets reaches a
15 predetermined value.

20 32. The program as claimed in claim 28,
further comprising the instruction of:
causing the computer to cause the electronic
apparatus to reboot when the count value of the number
of times of occurrence of an abnormality has not reached
25 the predetermined value.

5 33. The program as claimed in claim 32,
further comprising the instruction of:
 causing the computer to display that reboot is
 to be performed before the electronic apparatus is
 caused to perform reboot.

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15 34. A processor-readable medium storing a
program for causing a computer to control an electronic
apparatus, said program comprising the instructions of:
 causing the computer to detect an abnormality
when the abnormality occurs in the electronic apparatus;
 causing the computer to determine a type of
20 the detected abnormality; and
 causing the computer to inform an external
apparatus of the abnormality when the type of the
abnormality is determined to represent an abnormality
that cannot be eliminated by a user of the electronic
25 apparatus.

5 35. The processor-readable medium storing the
program as claimed in claim 34, wherein the program
further comprises the instructions of:

causing the computer to receive a request for
using one or more functions of the electronic apparatus;
10 and

causing the computer to display that the
abnormality is occurring, in a case where the type of
abnormality is determined to represent an abnormality in
a predetermined function, and only when a request for
15 using the predetermined function is received.

20 36. The processor-readable medium storing the
program as claimed in claim 34, wherein the program
further comprises the instruction of:

causing the computer to save history of the
abnormality when the type of the abnormality is
25 determined to represent an abnormality that requires

only history saving.

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37. The processor-readable medium storing the program as claimed in claim 34, wherein the program further comprises the instructions of:

causing the computer to count the number of
10 times of occurrence of an abnormality;

causing the computer to up count when the type
of the abnormality is determined to represent an
abnormality that can be eliminated by the user of the
electronic apparatus; and

15 causing the computer to inform the external
apparatus of a corresponding abnormality when a count
value reaches a predetermined value.

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38. The processor-readable medium storing the program as claimed in claim 37, wherein the program further comprises the instruction of:

25 causing the computer to display occurrence of

an abnormality when the count value has not reached the predetermined value.

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39. The processor-readable medium storing the program as claimed in claim 37, the program further comprises the instruction of:

10 causing the computer to reset the count value when the count value thereof reaches the predetermined value.

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40. The processor-readable medium storing the program as claimed in claim 37, wherein the program further comprises the instructions of:

20 causing the computer to form an image on a recording medium;

causing the computer to count the number of sheets each having an formed image thereon since the abnormality that can be eliminated by the user of the
25 electronic apparatus is detected until the abnormality

is detected again; and

causing the computer to reset the count value when a count value of the number of sheets reaches a predetermined value.

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41. The processor-readable medium storing the
10 program as claimed in claim 37, wherein the program
further comprises the instruction of:

causing the computer to cause the electronic
apparatus to reboot when the count value of the number
of times of occurrence of an abnormality has not reached
15 the predetermined value.

20 42. The processor-readable medium storing the
program as claimed in claim 41, wherein the program
further comprises the instruction of:

causing the computer to display that reboot is
to be performed before the electronic apparatus is
25 caused to perform reboot.